

20 m. high, known by the local names of *Kokobila* (Bougainville) and *Maroi* or *Undie* (Guadalcanal); the natives make a poultice from the leaves and apply it to sores. The ripe fruits are black, on a yellow receptacle.

Another specimen from Bougainville which may also represent the species is *Kajewski 1887* (Kugumaru, Buin, alt. 150 m.; tree to 12 m. high, in rain-forest; native name: *Cher-rau*). This plant has leaf-blades up to 30 cm. long and 11 cm. broad and is more robust throughout than those cited above. It may represent an undescribed species, but the variation within species of *Hedycarya* is unusually pronounced; additional material is desired before the extreme limits of *H. solomonensis* are known.

LEVIERIA Becc.

Levieria nitens Perk. in Perk. & Gilg, Pflanzenr. 4 (IV. 101): 21. 1901; Pflanzenr. 49 (IV. 101. Nachtr.): 7. f. 3, R, S. 1911; Bot. Jahrb. 52: 196. 1915; S. Moore, Jour. Bot. 61: Suppl. 41. 1923.

BRITISH NEW GUINEA: Central Division, Dieni, Ononge Road, alt. 500 m., *Brass 3805* (A, NY) (erect tree 20 m. tall, common in rain-forest, the bark brittle, dark brown, with a few scattered lenticels, the wood hard, brown, with numerous fine rays; leaves smooth, paler beneath; receptacle fleshy, yellow, the fruits orange-yellow). NETHERLANDS NEW GUINEA: 4 km. southwest of Bernhard Camp, Idenburg River, alt. 900 m., *Brass 13086* (tree 7–8 m. high, common in mossy forest substage layer; receptacle orange, the fruits red).

The species has previously been reported only from two collections by Forbes from Sogere. No. 13086 differs from the other in having its secondary nerves slightly more spreading, but it seems to fall into a reasonable concept of the species.

Levieria squarrosa Perk. Bot. Jahrb. 52: 196. 1915.

NETHERLANDS NEW GUINEA: 15 km. southwest of Bernhard Camp, Idenburg River, alt. 1800 m., *Brass 12253* (tree 3–4 m. high with weak slender branches, occasional in mossy forest seral growths; receptacle yellow, the fruits black); 18 km. southwest of Bernhard Camp, alt. 2150 m., *Brass 12493* (weak slender tree 3–6 m. high, very abundant in young seral growths of mossy forest; receptacle fleshy, orange, the fruits reddish black).

The cited specimens agree well with the description of *L. squarrosa*, otherwise reported only from Ledermann's collections in the neighboring Sepik River region of Northeastern New Guinea. A comparison with type material should be made before the Brass specimens are definitely taken as this species.

Levieria parvifolia sp. nov.

Frutex vel arbor parva 2–3 m. alta ubique sub anthesi glabra, ramulis gracilibus subteretibus apicem versus stramineis demum cinereis; foliis oppositis vel suboppositis, petiolis 4–7 mm. longis, laminis tenuiter coriaceis vel chartaceis siccitate fusco-olivaceis elliptico-oblongis, 3–5 cm. longis, 1–2 cm. latis, basi acutis et in petiolum decurrentibus, apice obtusis vel subacutis et inconspicue calloso-apiculatis, margine dentibus paucis (utrinsecus 2 vel 3) calloso-apiculatis ornatis et leviter recurvatis, costa supra valde prominula subtus subprominente, nervis secundariis utrinsecus 5–9 brevibus patentibus supra subimmersis vel leviter prominulis subtus manifeste elevatis, venulis inconspicuis subtus leviter prominulis; inflorescentiis ♀ paucis axillaribus plerumque unifloris, pedunculo gracili interdum ad 2 cm. longo bracteis 2- vel 3-jugis oppositis oblongis subacutis ad 1 mm. longis saepe ornato interdum nullo, pedicello gracili 6–13 mm. longo; floribus late cupuliformibus sub anthesi 5–6 mm. diametro, receptaculo complanato, tepalis 4 incurvatis tenuiter coriaceis late deltoideis subacutis, circiter 2 mm. longis et 4 mm. latis; carpellis 35–40 congestis 1.5–2 mm. longis leviter angulatis in stylum brevem subacutum desinentibus; receptaculo sub fructu coriaceo ad 8 mm. diametro, drupis maturis 1–5 ovoideis subacutis ad 9 mm. longis et 6 mm. latis.

BRITISH NEW GUINEA: Central Division, Murray Pass, Wharton Range, alt. 2840 m., *Brass* 4630 (A, TYPE, NY), July 28, 1933 (forest substage tree or bush, loosely branched, 2–3 m. high; leaves shining, paler beneath; fruit smooth, yellow).

Levieria parvifolia appears to be closely related to *L. squarrosa* Perk., differing in its smaller leaf-blades with fewer serrations and the apex acute or obtuse rather than obviously acuminate, and in the presence of obvious tepals on the pistillate flowers.

IDENBURGIA Gibbs

Idenburgia elaeocarpoides Gilg & Schlecht. Bot. Jahrb. 58: 247. 1923.

NORTHEASTERN NEW GUINEA: Morobe District, Yunzaing, alt. 1350 m., *Clemens* 3978 (tree, on forest hill, the trunk 30 cm. diam.; fruit green); Ogeramngang, alt. 1800 m., *Clemens* 5122. NETHERLANDS NEW GUINEA: 18 km. southwest of Bernhard Camp, Idenburg River, alt. 2150 m., *Brass* 12661 (occasional subsidiary tree about 20 m. high, in mossy forest; leaves stiff, concave, very pale beneath; flowers white, fleshy; fruit red); Bele River, 18 km. northeast of Lake Habbema, alt. 2200 m., *Brass* 11078 (tree 14 m. high, in old secondary forest; leaves very pale beneath; fruit red); 9 km. northeast of Lake Habbema, alt. 2740 m.,

Brass & Versteegh 10472 (tree 15 m. high, rare in mossy forest, the trunk 27 cm. diam., the crown not wide-spreading; immature flowers and fruits green; bark 5 mm. thick, black, fissured, rough; wood orange-colored).

The differences between *I. pachyphylla* and *I. elaeocarpoides*, the two new species proposed by Gilg and Schlechter in their discussion of *Idenburgia* (Bot. Jahrb. 58: 244–248. f. 1, 2. 1923), do not seem very pronounced. Our material agrees better with the description of *I. elaeocarpoides*, being glabrous throughout, but it is quite possible that the two names will prove conspecific. Our specimens are all in fruit, *Brass 12661* bearing flowers as well. The specimens available to Gilg and Schlechter apparently had uniformly 1-seeded fruits, but those cited above have about half of the fruits 2-seeded; the development to maturity of the second ovule appears to take place very frequently.

The species has previously been reported only from Ledermann's original collections in Northeastern New Guinea.

***Idenburgia pauciflora* sp. nov.**

Arbor ad 3.5 m. alta, ramulis copiosis gracilibus subteretibus apicem versus densissime et arcte brunneo-tomentellis demum glabratis et cinereis; foliis oppositis vel suboppositis vel interdum ad apices ramulorum verticillatis, petiolis gracilibus leviter canaliculatis ut ramulis tomentellis 6–11 mm. longis, laminis papyraceis vel chartaceis obovato-ellipticis, 5–7 cm. longis, 1.8–2.8 cm. latis, basi acutis vel subattenuatis, apice abrupte cuspidatis (apice ipso ad 6 mm. longo calloso), margine inconspicue nigro-callosa-serrulatis (dentibus 4–8 per centimetrum), supra siccitate brunneis et pilis debilibus pallidis paucis exceptis glabris, subtus pallidioribus et praecipue ad nervos et venulas pilis crispulis stramineis ad 0.4 mm. longis tomentellis, costa supra impressa subtus elevata, nervis secundariis utrinsecus 5–8 brevibus subrectis anastomosantibus supra acute impressis subtus prominulis, venulis supra immersis subtus paullo prominulis; inflorescentiis solitariis terminalibus paucifloris breviter racemosis sub anthesi 6–15 mm. longis, pedunculo brevi (ad 3 mm. longo) et rhachi teretibus 1–1.5 mm. diametro dense stramineo-tomentellis (pilis circiter 0.4 mm. longis), rhachi cicatricibus florum delapsorum saepe congestis conspicue ornata; bracteis submembranaceis ovato-oblongis obtusis, 4–4.5 mm. longis, circiter 2.5 mm. latis, extus pilis ad 0.7 mm. longis dense tomentellis, intus glabris, mox deciduis; floribus 6–10 per inflorescentiam mox caducis sub anthesi plerumque paucioribus, pedicellis crassis brevissimis (circiter 0.8 mm. longis) ut rhachi tomentellis; tepalis 4 membranaceis obovato-

orbicularibus mox caducis, circiter 2.5 mm. diametro, margine integris vel leviter undulatis, exterioribus ut bracteis extus conspicue tomentellis, interioribus utrinque glabris; staminibus circiter 8 glabris, filamentis carnosis complanatis circiter 0.2 mm. longis, antheris oblongis falcato-incurvatis 1.7–2 mm. longis, apice obtusis; gynaecio oblongo sub anthesi circiter 1.3 mm. longo et 1 mm. diametro, ovario pilis circiter 0.3 mm. longis dense stramineo-tomentello, stigmatibus sessilibus glabris pulvinatis obscure lobatis.

NORTHEASTERN NEW GUINEA: Morobe District, Yunzaing, alt. about 1400 m., *Clemens* 3828 (TYPE), Aug. 11, 1936 (tree about 3.5 m. high, along forest trail; flowers cream-colored).

Idenburgia pauciflora is very distinct from the four species of the genus thus far known, being characterized by the small size of all its parts (leaves, inflorescences, and flowers) and the conspicuous tomentum of its branchlets, petioles, leaf-blades, and inflorescences. The tomentellous ovary appears to be especially noteworthy. In leaf-shape and size, the new species is perhaps most suggestive of *I. novo-guineensis* Gibbs, but characters of pubescence and inflorescence-size readily separate the two species.

STEGANTHERA Perk.

Steganthera Schumanniana Perk. Bot. Jahrb. **25**: 565. 1898; Perk. & Gilg, Pflanzenr. 4 (IV. **101**): 53. 1901; Kaneh. & Hatus. Bot. Mag. Tokyo **52**: 355. 1938.

NORTHEASTERN NEW GUINEA: Morobe District, Ogeramang, alt. about 1600 m., *Clemens* 4840.

The cited specimen agrees well with the two previously known, both from the same general region, but often has the leaf-blades with a few inconspicuous callose-apiculate teeth on each side.

Steganthera ilicifolia sp. nov.

Frutex monoecus ad 2.5 m. altus, ramulis gracilibus subteretibus ad nodos complanatis juventute purpurascens et inconspicue cinereo-strigillosis mox glabris et stramineis; foliis oppositis, petiolis rugosis canaliculatis mox glabris 4–7 mm. longis, laminis chartaceis elliptico-oblongis, 4.5–8.5 cm. longis, 1.5–4.5 cm. latis, basi obtusis, apice acuminatis (acumine 5–10 mm. longo calloso-apiculato), margine dentibus deltoideis conspicuis calloso-apiculatis utrinsecus 3–5 remote serratis, utrinque glabris, siccitate supra viridi-olivaceis subtus fuscis, costa supra valde elevata subtus prominente, nervis secundariis utrinsecus 4–6 arcuatis anastomosantibus utrinque conspicue elevatis, venulis copiose reticulatis utrinque valde prominulis; inflorescentiis axillaribus pauci-

floris breviter paniculatis vel racemosis sub anthesi ad 1.5 cm. longis, ubique pilis fusco-cinereis 0.2–0.3 mm. longis inconspicue adpresso-strigosis demum glabris, bracteis oblongis 1–2 mm. longis caducis, rhachi pedicellisque gracilibus, pedicellis 2–4 mm. longis, bracteolis 2 apicem pedicelli versus insertis lineari-oblongis obtusis ad 1.5 mm. longis vel nullis; floribus ♂ subglobosis 2–2.5 mm. diametro, receptaculo urceolato carnosio circiter 0.5 mm. crasso intus glabro, tepalis 4 minutis inflexis anguste imbricatis deltoideis obtusis, 0.3–0.5 mm. longis, 0.5–1 mm. latis; staminibus 4 oblongis carnosis, circiter 0.8 mm. latis, exterioribus circiter 1.2 mm. longis, interioribus paullo brevioribus, filamentis brevibus glabris, antheris apice rotundatis; floribus ♀ ut ♂ similibus vel paullo majoribus, apice mucronulatis, receptaculo intus obscure sericeo, tepalis subnullis; carpellis circiter 10 congestis parce et demum densiore pilosis 1.2–1.5 mm. longis, ovario ovoideo, stylo subulato; inflorescentiis sub fructu ad 3 cm. longis, receptaculo plerumque unico ad 6 mm. diametro, drupis maturis ut videtur 2–5 ovoideis ad 10 mm. longis et 8 mm. latis, breviter stipitatis, demum glabris, apice saepe apiculatis.

BRITISH NEW GUINEA: Central Division, Murray Pass, Wharton Range, alt. 2840 m., *Brass* 4752 (A, TYPE, NY), Aug. 8, 1933 (straggling bush up to 2.5 m. high, very common, forming small thickets in forest fringes and isolated forest patches; receptacle yellow, fleshy).

This well-marked species appears most closely related to *S. Schumanniana* Perk., from which it obviously differs in its smaller conspicuously toothed leaf-blades with strongly prominulous venation, its more compact inflorescences, and its glabrous stamens.

***Steganthera elliptica* sp. nov.**

Arbor parva ad 1.5 m. alta ubique praeter inflorescentiam parcissime cinereo-strigosam glabra, ramulis gracilibus subteretibus ad nodos complanatis mox cinereis; foliis oppositis, petiolis gracilibus rugosis 5–13 mm. longis, laminis chartaceis ellipticis, 5–9.5 cm. longis, 3–5 cm. latis, basi obtusis et in petiolum decurrentibus, apice obtusis vel breviter cuspidatis (apice ipso calloso-apiculato), margine dentibus minutis calloso-apiculatis utrinsecus 3–5 remote serratis, siccitate utrinque fusco-viridibus, costa supra conspicue elevata subtus prominente, nervis secundariis utrinsecus 4–6 leviter arcuatis marginem versus anastomosantibus supra subplanis subtus prominulis, venulis supra immersis subtus leviter prominulis; inflorescentiis axillaribus plerumque plurifloris paniculatis sub anthesi 3–8 cm. longis mox glabris, bracteis oblongis obtusis ad 1 mm. longis manifeste strigosis, pedicellis gracilibus ad 6 mm. longis saepe minute bibracteolatis; floribus ♀ ellipsoideis circiter 3 mm. longis et

2.5 mm. latis apice piloso-apiculatis, receptaculo carnosio urceolato intus dense brunneo-strigoso, tepalis subnullis, ore minuto; carpellis circiter 14 glabris 1.2–1.4 mm. longis, ovario oblongo-ellipsoideo, stylo minuto subacuto; receptaculis sub fructu plerumque (1–)2–5 per inflorescentiam coriaceis ad 1 cm. diametro, drupis maturis ut videtur 2–6 ovoideis ad 10 mm. longis et 6 mm. latis sessilibus subacutis.

NORTHEASTERN NEW GUINEA: Morobe District, Ogeramngang, alt. about 1800 m., *Clemens 5105* (TYPE), Jan. 23, 1937 (small tree 4 ft. high, in woods near water-supply; receptacle yellow, the fruits red); Mount Kudose Seggele, Ogeramngang, alt. 1850–2150 m., *Clemens 4934* (small tree 4 ft. high, in forest; receptacle yellow, the fruits red).

Steganthera elliptica is of the relationship of *S. oblongiflora* Perk. and *S. atepala* Perk., differing from both in its more completely glabrous habit and its elliptic and proportionately broader leaf-blades, which are sparsely serrate and obtuse or merely cuspidate rather than long-acuminate at apex.

Steganthera insignis Perk. Pflanzenr. 49 (IV. 101. Nachtr.): 24. 1911; Bot. Jahrb. 52: 202. 1915; Diels in White, Jour. Arnold Arb. 10: 214. 1929.

NETHERLANDS NEW GUINEA: 6 km. southwest of Bernhard Camp, Idenburg River, alt. 1250 m., *Brass 13029* (small tree 2 m. high, in rain-forest undergrowth; receptacle orange-yellow, the fruits purple-black); 4 km. southwest of Bernhard Camp, alt. 850 m., *Brass 13464* (undergrowth tree 3 m. high, in rain-forest of river flood-plain; nodes of branches myrmecophilous; receptacle red, the fruits reddish brown).

This curious plant has previously been reported only from Northeastern and British New Guinea. The species was confused with *Anthobembix hospitans* (Becc.) Perk. by Perkins in her earlier treatments (Perk. & Gilg, Pflanzenr. 4 (IV. 101): 55. 1901; in K. Schum. & Lauterb. Fl. Deutsch. Schutzg. Südsee 330. 1901). Its staminate flowers are turbinate or essentially globose, as is usual for *Steganthera*, but its pistillate flowers are somewhat patelliform, with the perianth conspicuously expanded laterally into a circular flange. This type of pistillate perianth is not otherwise found in *Steganthera* but is essentially similar to that of *Anthobembix*. The present species, therefore, seems to form a connecting link between the genera and may well be sought in *Anthobembix*. Our specimens agree well with *Brass 1331* from British New Guinea (cited by Diels), but that specimen has only pistillate flowers.

ANTHOBEMBIX Perk.

***Anthobembix myrtifolia* sp. nov.**

Arbor gracilis 3–4 m. alta, ramulis gracilibus subteretibus purpurascentibus juventute cinereo-adpresso-strigosis mox glabris; foliis oppositis, petiolis gracilibus canaliculatis 4–6 mm. longis ut ramulis strigosis mox glabris, laminis tenuiter coriaceis oblongo-ellipticis, 3–6 cm. longis, 1–3 cm. latis, basi acutis et in petiolum decurrentibus, apice acutis vel breviter cuspidatis et calloso-apiculatis, margine integris et leviter incrassatis, utrinque glabris et siccitate fusco-viridibus, costa utrinque valde elevata, nervis secundariis utrinsecus 3–6 anastomosantibus, cum venulis copiose reticulatis utrinque valde prominulis; inflorescentiis ♂ axillaribus 1–3 cm. longis 2- vel saepe 1-floris ubique dense cinereo-adpresso-strigillosis, bracteis elongato-deltaideis ad 2 mm. longis mox delapsis, pedicellis gracilibus ad 15 mm. longis apicem versus interdum bibracteolatis (bracteolis lanceolato-oblongis acutis circiter 1.5 mm. longis); floribus mox glabris plus minusve patelliformibus circiter 2 mm. altis et 5 mm. diametro, receptaculo carnosio margines versus conspicue complanato intus obscure sericeo, tepalis minutis ut videtur 4 deltaideis acutis anguste imbricatis; staminibus 4 oblongis circiter 1 mm. latis, majoribus 1 mm. minoribus 0.7 mm. longis, filamentis carnosis dense strigoso-sericeis, antheris apice rotundatis per rimas introrsas horizontales dehiscentibus; inflorescentiis ♀ ut ♂ similibus sed plerumque unifloris; receptaculo turbinato apicem versus lateraliter paullo expanso, sub anthesi 2–2.5 mm. longo et circiter 3 mm. diametro, intus dense strigoso, tepalis ut videtur subnullis; carpellis circiter 6, 1.3–1.5 mm. longis, ovario ellipsoideo dense strigoso, stylo brevi subulato acuto glabro; pedicello sub fructu paullo incrassato ad 18 mm. longo, receptaculo coriaceo circiter 4 mm. diametro, drupis maturis paucis elliptico-ovoideis ad 13 mm. longis et 9 mm. latis, breviter stipitatis, apice rotundatis, extus conspicue rugosis.

NETHERLANDS NEW GUINEA: 18 km. southwest of Bernhard Camp, Idenburg River, alt. 2150 m., *Brass* 12498 (slender tree 3–4 m. high, frequent in mossy forest seral growths), 12672 (TYPE), Feb. 1939 (tree 3 m. high, in bamboo undergrowth of mossy forest).

The type bears staminate flowers and a single detached drupe, while no. 12498 bears pistillate flowers and fruiting receptacles. The new species is peculiar in *Anthobembix* in the fact that, although its staminate flowers have the receptacle greatly expanded as is usual for the genus, the receptacle of the pistillate flowers is merely slightly expanded and is more suggestive of the genus *Steganthera*. *Anthobembix myrtifolia* is

also at once distinguished from the members of either genus by its small stiff leaves; *A. parvifolia* Perk. is perhaps its closest ally.

***Anthobembix Brassii* sp. nov.**

Frutex subscandens, ramulis subteretibus juventute pilis crispis simplicibus 0.3–1 mm. longis densissime pallide brunneo-tomentosis demum glabris cinereis; foliis oppositis vel suboppositis, petiolis rugulosis ut ramulis decidue tomentellis mox glabris 10–22 mm. longis, laminis chartaceis elliptico-oblongis, 8–13 cm. longis, 3.5–6.5 cm. latis, basi late obtusis vel rotundatis, apice breviter cuspidatis, margine integris vel interdum utrinsecus dentibus ad 5 minutis callosio-apiculatis remote et obscure serratis, siccitate utrinque fusco-viridibus vel subtus brunneis, supra glabris, subtus tomentum crispulum cinereum evanescentem (pilis ad 0.7 mm. longis) gerentibus mox glabris, costa supra valde elevata subtus prominente, nervis secundariis utrinsecus 6–9 erecto-patentibus conspicue anastomosantibus supra valde prominulis subtus subprominentibus, venulis copiose reticulatis utrinque prominulis; inflorescentiis axillaribus vel subterminalibus cymosis vel paniculato-cymosis paucifloris (plerumque 3- interdum ad 9-floris) ad 4 cm. longis, ubique praeter florum superficies pilis fusco-stramineis 0.5–0.7 mm. longis dense tomentellis, pedunculo ad 2 cm. longo, bracteis oblongis 1.5–2.5 mm. longis caducis, pedicellis ad 7 mm. longis infra medium et apicem bracteolam unicam lineari-oblongam obtusam ad 2 mm. longam caducam gerentibus; floribus ♂ plerumque ad apices inflorescentiae ternatis supra glabris et nigrescentibus patelliformibus valde complanatis, sub anthesi ad 4 mm. altis et 9 mm. diametro, receptaculo carnosio ad margines conspicue expanso intus stramineo-strigoso, tepalis minutis vel subnullis; staminibus 4 carnosio oblongis circiter 1.2 cm. latis, majoribus sub anthesi 1.5 mm. minoribus 1.2 mm. longis, filamentis brevibus basi pilis ad 1 mm. longis conspicue brunneo-strigosis, antheris apice rotundatis per rimas introrsas horizontales dehiscentibus; floribus ♀ ut ♂ similibus, carpellis 10–14 sub anthesi 2–2.5 mm. longis, ovario oblongo-ellipsoideo pilis ad 1 mm. longis dense brunneo-setoso, stylo brevi subacuto glabro; pedunculis pedicellisque sub fructu incrassatis demum subglabris, receptaculo coriaceo saepe solitario ad 8 mm. diametro supra persistenter strigoso, drupis maturis saepe numerosis (2–10) coriaceis sessilibus ellipsoideis ad 12 mm. longis et 10 mm. latis, apice abrupte mucronatis, demum glabris, extus conspicue rugosis.

NETHERLANDS NEW GUINEA: 9 km. northeast of Lake Habbema, alt. 2800 m., *Brass 10261* (TYPE), Oct. 1938 (large subscandent shrub, occasional in undergrowth of primary forest).

Anthobembix Brassii is readily distinguished by the evanescent crisp pale tomentum of its branchlets and foliage, its compact and densely tomentellous inflorescences, and its flattened flowers which are glabrous above. Probably more closely related to *A. oligantha* Perk. than to other described species, it is sharply distinct on the basis of the mentioned characters.

KIBARA Endl.

Kibara laurifolia sp. nov.

Arbor ad 6 m. alta sub fructu ubique glabra, ramulis fusco-cinereis subteretibus apicem versus 2.5–4 mm. diametro ad nodos incrassato-complanatis; foliis oppositis vel suboppositis, petiolis rugulosis crassis (2–4 mm. diametro) profunde canaliculatis 3–10 mm. longis, laminis coriaceis siccitate pallide olivaceis late ellipticis, 9–15 cm. longis, 4.5–8.5 cm. latis, basi obtusis, apice breviter cuspidatis vel subacutis, margine integris et conspicue anguste recurvatis, costa supra elevata et saepe striata subtus prominente, nervis secundariis utrinsecus 6–8 adscendentibus subrectis vel margines versus leviter arcuatis supra prominulis subtus acute elevatis, venulis reticulatis utrinque prominulis vel supra subimmersis; inflorescentiis sub fructu axillaribus vel subterminalibus 3–8 cm. longis, pedunculo ad 3 cm. longo pedicellisque paullo complanatis, pedicellis 10–27 mm. longis apicem versus incrassatis, receptaculis 2–6 per inflorescentiam vel interdum solitariis coriaceis 5–10 mm. diametro, drupis maturis pluribus coriaceis oblongo-ovoideis, ad 16 mm. longis et 10 mm. latis, stipitibus 2–3 mm. longis et crassis articulatis ornatis, apice inaequaliter apiculatis, basi obtusis vel rotundatis, extus sublevibus.

NETHERLANDS NEW GUINEA: Bele River, 18 km. northeast of Lake Habbema, alt. 2200 m., *Brass* 11218 (TYPE), Nov. 1938 (tree 6 m. high, common in secondary forest, the fruits unripe).

Kibara laurifolia is a species with glabrous coriaceous leaf-blades, but it does not seem closely related to any of the species in this section of Perkins' key (Bot. Jahrb. 52: 208. 1915). Although flowers are not available, the new species seems more closely allied to *K. monticola* Perk., from which it differs in its shorter and proportionately broader leaf-blades with acute or cuspidate rather than acuminate apices, more ascending secondary nerves, and venation more obvious on the upper leaf-surface.

Kibara Archboldiana sp. nov.

Frutex vel arbor parva ad 3 m. alta, ramulis stramineis gracilibus subteretibus glabris infra nodos conspicue incrassato-clavatis pertusis intus concavis formicas hospitantibus; foliis oppositis, petiolis rugulosis

incrassatis (2–4 mm. diametro) 5–25 mm. longis, laminis chartaceis vel papyraceis oblongo-ellipticis, 15–36 cm. longis, 6–15 cm. latis, basi rotundatis vel late obtusis, apice conspicue et abrupte acuminatis (acumine gracili 1–2 cm. longo obtuso), margine integris et anguste recurvatis, utrinque olivaceis et glabris vel subtus juventute sub lente minutissime et decidue puberulis, costa supra elevata et saepe striata subtus prominente, nervis secundariis utrinsecus 6–10 arcuato-patentibus conspicue anastomosantibus supra valde elevatis subtus prominentibus, venulis copiose reticulatis utrinque valde prominulis; inflorescentiis subfasciculatis vel contracto-racemosis paucifloris sub anthesi quam petiolis multo brevioribus ad 8 mm. longis, ubique minute cinereo-puberulis, pedunculo crasso brevi, bracteis inconspicuis papyraceis suborbicularibus ad 0.4 mm. longis, pedicellis gracilibus sub anthesi 3–6 mm. longis apicem versus minute bibracteolatis; floribus ♂ subglobosis 2–4 mm. diametro, receptaculo crasse carnosio (ad 1 mm. crasso) valde cupuliformi; tepalis 6 minutis ovatis rotundatis, 4 per paria cruciatim oppositis anguste imbricatis, 2 exterioribus duplicatis; staminibus 6, 4 exterioribus 1–1.6 mm. longis, antheris subsessilibus ovoideis per rimam horizontalem semi-orbicularem dehiscentibus; inflorescentiis sub fructu valde incrassatis, receptaculis 1 vel 2 coriaceis 8–12 mm. diametro, drupis maturis pluribus ovoideo-oblongis, 16–23 mm. longis, 8–10 mm. latis, breviter stipitatis (stipitibus 1–3 mm. longis superne valde incrassatis articulatis), apice inaequaliter subacutis, extus valde rugulosis.

BRITISH NEW GUINEA: Central Division, Dieni, Ononge Road, alt. 500 m., *Brass 3938* (A, NY, TYPE), May 2, 1933 (weak-branched bush or small tree 2–3 m. high, fairly common in rain-forest, the leaf-blades shining above; flowers yellow; receptacle bright orange, the drupes shining purple-black); Western Division, Fly River, 528-mile Camp, alt. 80 m., *Brass 6858* (sparse-foliaged tall shrub 2 m. high, in forest undergrowth on a ridge-top).

Kibara Archboldiana is a close relative of *K. formicarum* Becc., resembling it in foliage, the myrmecophytic habit, etc., but differing in having the secondary nerves of the leaf-blades raised instead of impressed above, the inflorescence more compact, the tepals smaller and inconspicuous, the stamens 6 rather than 8, and the drupes longer and proportionately narrower.

Kibara inamoena Perk. Pflanzenr. 49 (IV. 101. Nachtr.): 34. 1911; Bot. Jahrb. 52: 211. 1915.

BRITISH NEW GUINEA: Lake Daviumbu, Middle Fly River, *Brass 7560* (undergrowth tree 5 m. high, in rain-forest; leaves smooth and shining, the nerves prominent on both sides).

The cited specimen agrees very well with the type collection of the species in foliage, although the leaf-blades of our specimen are often faintly puberulent beneath and have the areoles of the veinlet-reticulation slightly larger. The range of variation of the species cannot be fully understood at present; it has previously been represented only by two collections from Northeastern New Guinea. The Brass specimen, in fruit, has the inflorescences to 6 cm. long, the pedicels 13–22 mm. long, the receptacle 4–10 mm. in diameter, and the drupes ovoid-ellipsoid, to 13 by 10 mm., subacute, short-stipitate.

Kibara papuana sp. nov.

Frutex vel arbor parva ad 2 m. alta ubique praeter flores glabra, ramulis gracilibus stramineis subteretibus vel apices versus complanatis; foliis oppositis vel suboppositis, petiolis gracilibus canaliculatus 3–10 mm. longis, laminis papyraceis translucetibus oblongo-ellipticis, 9–17 cm. longis, 3.5–7 cm. latis, basi obtusis et in petiolum paullo decurrentibus, apice cuspidatis (apice ipso ad 5 mm. longo obtuso), margine integris, utrinque olivaceis, costa supra subplana vel leviter elevata subtus prominente, nervis secundariis utrinsecus 6–9 arcuato-ascendentibus supra prominulis vel subplanis subtus elevatis, venulis reticulatis utrinque paullo prominulis vel supra subimmersis; inflorescentiis axillaribus vel e ramulis inter folia orientibus fasciculatis paucifloris (in specimine nostro 1- vel 2-floris), bracteis deltoideis subacutis ad 1 mm. longis, pedicellis crassis sub anthesi circiter 2 mm. longis, apice quadibracteolatis (bracteolis late deltoideis vel semiorbicularibus obtusis, inferioribus circiter 0.5 mm. longis et 1 mm. latis, superioribus circiter 1 mm. longis et 1.5 mm. latis infra tepala orientibus); floribus ♂ 2–2.5 mm. longis et diametro, receptaculo tenuiter carnosio leviter cupuliformi; tepalis 6 submembranaceis late semiorbicularibus, circiter 1 mm. longis, 1.5–2 mm. latis, apice rotundatis, luteo-glandulosis, 4 per paria cruciatim oppositis, 2 exterioribus duplicatis; staminibus 6 obovoideis circiter 0.8 mm. latis, 4 exterioribus circiter 1.2 mm. longis, 2 interioribus paullo brevioribus, filamentis gracilibus dense stramineo-sericeis, antheris late deltoideis obtusis per rimam horizontalem semiorbicularem dehiscentibus; floribus ♀ ut ♂ plus minusve similibus, receptaculo subcomplanato intus dense aureo-setuloso, tepalis paullo majoribus calyptra sub anthesi supra receptaculum circumscisse deciduis; carpellis 7 ovoideis circiter 1.5 mm. longis, ovario dense stramineo-sericeo, stylo brevi; inflorescentiis sub fructu incrassatis, receptaculis 1 vel 2 coriaceis stipitibus exceptis ad 7 mm. diametro, drupis maturis pluribus ellipsoideis, 12–18 mm. longis, 7–11 mm. latis, interdum paullo lateraliter compressis, stipitibus crassis

(ad 3 mm. diametro) 4–6 mm. longis ornatis, apice obtusis vel rotundatis, extus saepe valde tuberculato-rugosulus.

BRITISH NEW GUINEA: Central Division, Dieni, Ononge Road, alt. 500 m., *Brass* 3798 (NY, TYPE), Apr. 20, 1933 (shrub 2 m. high, in rain-forest understory; leaves shining on both sides; flowers yellow; drupes black, wrinkled), *Brass* 3992 (A, NY) (tall bush or small tree, in rain-forest understory; leaves flat, smooth; drupes rugose, yellow-green, at length pale purple); Iawarere, alt. about 300 m., *Brass* 668 (large weak shrub, in rain-forest; drupes yellow).

All the cited specimens bear fruits, but only the type has flowers, and these are very few, so that the above floral descriptions are based merely upon one staminate and one pistillate flower. Nevertheless, the material is sufficient to indicate that an unusual species is represented, characterized by thin entire leaf-blades of medium size for the genus, very compact and few-flowered inflorescences, short pedicels, a supplementary pair of bracteoles on the receptacle (somewhat intermediate in size and position between the pedicellary bracteoles and the tepals), and conspicuously rugulose drupes. Its alliance is apparently with *K. inamoena* Perk., a species with undulate-serrulate leaf-blades, comparatively ample inflorescences with long pedicels, and more numerous carpels.

***Kibara rigidifolia* sp. nov.**

Arbor ad 4 m. alta sub fructu ubique glabra, ramis elongatis, ramulis stramineis crassis (apicem versus 5–7 mm. diametro) juventute conspicue angulatis; foliis suboppositis apices ramulorum versus ut videtur congestis, petiolis rugosis 2–3 mm. diametro 13–20 mm. longis, laminis tenuiter coriaceis siccitate flavovirente-olivaceis lanceolato-oblongis, 18–31 cm. longis, 4.5–7.5 cm. latis, basi attenuatis et in petiolum decurrentibus, apice conspicue calloso-apiculatis, margine leviter recurvatis interdum integris interdum dentibus utrinsecus ad 8 disperse spinulosis, costa supra leviter elevata et striata subtus prominente, nervis secundariis utrinsecus 20–27 cum aliis interspersis patentibus rectis anastomosantibus utrinque valde prominulis, venulis reticulatis utrinque paullo prominulis; inflorescentiis axillaribus sub fructu ad 3 cm. longis pauciramosis, pedunculo brevi ad 15 mm. longo, pedicellis crassis 12–15 mm. longis, receptaculis 1 vel 2 coriaceis stipitibus exceptis 6–8 mm. diametro, drupis maturis pluribus ovoideis, 12–16 mm. longis, 8–10 mm. latis, breviter stipitatis (stipitibus incrassatis 1–3 mm. longis), apice conspicue apiculatis, extus levibus vel paullo rugulosis.

BRITISH NEW GUINEA: Lower Fly River, east bank opposite Sturt Island, *Brass* 8216 (TYPE), Oct. 1936 (tree 4 m. high, with long droop-

ing branches, in undergrowth on a moist shaded cliff-face in rain-forest, the branchlets 3-angled; leaves stiff, narrowly recurved at margins; receptacle orange, the drupes smooth, black).

Although the cited specimen lacks flowers, it obviously belongs in *Kibara* and, on the basis of foliage characters, seems certainly to be undescribed. It appears to be most closely related to *K. Ledermannii* Perk., from which it differs in its angled branchlets, proportionately narrower and often spinulose-margined leaf-blades, apparently more compact fruiting inflorescence, and less conspicuously stipitate drupes. Compared with *K. olivaeformis* Becc., another relative, *K. rigidifolia* is distinguished by its differently shaped proportionately broader drupe as well as by foliage details.

***Kibara elongata* sp. nov.**

Arbor gracilis ad 2.5 m. alta sub fructu ubique glabra, ramulis stramineis elongatis gracilibus subteretibus vel ad nodos leviter incrassato-complanatis; foliis oppositis, petiolis crassis (3–5 mm. diametro) 14–20 mm. longis leviter canaliculatis, laminis tenuiter coriaceis siccitate viridivivaceis lanceolato-oblongis, 20–40 cm. longis, 6–11 cm. latis, basi attenuatis et in petiolum decurrentibus, apice longe acuminatis (acumine gracili 18–25 mm. longo calloso-subacuto), margine interdum dentibus paucis disperse et inconspicue spinulosis interdum integris, costa supra elevata et saepe inconspicue canaliculata subtus prominente, nervis secundariis utrinsecus 10–14 cum aliis interspersis patentibus rectis conspicue anastomosantibus utrinque acute elevatis, venulis reticulatis utrinque valde prominulis; inflorescentiis sub fructu axillaribus vel e ramulis inter folia orientibus pauciramosis 15–18 cm. longis, pedunculo 7–10 cm. longo pedicellisque gracilibus stramineis, pedicellis 2–4 cm. longis apicem versus incrassatis, receptaculis paucis (maturis circiter 2 per inflorescentiam) coriaceis stipitibus exceptis 7–12 mm. diametro, drupis maturis pluribus elliptico-oblongis, 22–27 mm. longis, 8–12 mm. latis, breviter stipitatis (stipitibus incrassatis 3–4 mm. longis et diametro), apice rotundatis et minute apiculatis, basi obtusis, extus rugulosis, semine siccitate nigrescente.

NETHERLANDS NEW GUINEA: 4 km. southwest of Bernhard Camp, Idenburg River, alt. 850 m., *Brass 13349* (TYPE), Mar. 1939 (slender tree 2.5 m. high, occasional in flood-plain rain-forest; receptacle orange, the drupes black).

Kibara elongata is related to the preceding new species (*K. rigidifolia*) and its allies, but is clearly distinguished by its long-acuminate leaf-blades and its elongate peduncles, pedicels, and drupes. In the latter

character it is suggestive of *K. olivaeformis* Becc., from which the acuminate and proportionately narrower leaf-blades and the elongate inflorescences distinguish it.

PALMERIA F. Muell.

Palmeria arfakiana Becc. Malesia 1: 186. 1877; Perk. & Gilg, Pflanzenr. 4 (IV. 101): 65, f. 18, L, M. 1901; Gibbs, Contr. Phyt. & Fl. Arfak Mts. 135. 1917.

NORTHEASTERN NEW GUINEA: Morobe District, Ogeramnang, alt. 1700–1800 m., *Clemens* 4485 (tree 10 m. high, on forest-margin; buds green to reddish), 5169 (small tree, on forest hill; flowers gray); Tobou, alt. about 1650 m., *Clemens* 6550.

The species has previously been reported only from the Arfak Mountains in Netherlands New Guinea; our specimens precisely match a fragment of the type collection. The first two specimens cited bear staminate flowers, the last fruits. In his original publication Beccari described only foliage and pistillate flowers; Gibbs later added a description of staminate flowers, but this description does not entirely agree with my present observations, the stamens having been mentioned as 1–4 in number. The fruit has not yet been described. Below I add a description of staminate flowers and fruits based on the cited material.

Staminate inflorescences axillary, to 4 cm. long, pseudopaniculate, few-branched, densely and closely cinereous-tomentellous throughout, the peduncle, rachis, and branchlets very slender, the pedicels 2–4 mm. long, the flowers subglobose or turbinate, 2–2.5 mm. in diameter slightly before anthesis; receptacle thin-carnose or membranous, obscurely puberulent within; tepals 5, inflexed in bud, deltoid-oblong, about 1.5 mm. long, long-acuminate; anthers about 15, sessile, deltoid-oblong, 0.5–0.6 mm. long, obtuse or minutely apiculate, often obscurely puberulent distally; fruiting inflorescences lax, to 12 cm. long, the branchlets sparsely puberulent, the fruiting receptacles irregularly subglobose, to 12 mm. in diameter, glabrescent, abruptly apiculate at apex, thin, brittle, the drupes 1–5, ovoid, angled by mutual pressure, about 7 mm. long and 5 mm. broad.

Palmeria incana sp. nov.

Frutex scandens, ramulis gracilibus rectis subteretibus densissime et minutissime stellato-cinereo-puberulis ad nodos complanatis; foliis oppositis vel suboppositis, petiolis 6–9 mm. longis ut ramulis puberulis, laminis tenuiter coriaceis oblongis, 9–16 cm. longis, 3.5–6.5 cm. latis, basi rotundatis vel late obtusis, apice breviter acuminatis (acumine ad 1 cm. longo obtuso), margine integris et anguste recurvatis, supra fusco-

olivaceis subnitidis glabris (vel ad costam sparse stellato-puberulis), subtus indumento albo-cinereo arcto densissime indutis (pilis minutis stellatis multiramosis, ramulis ad 0.1 mm. longis), costa supra conspicue impressa subtus prominente, nervis secundariis utrinsecus 7–9 patentibus rectis anastomosantibus supra inconspicuis subplanis subtus valde prominulis, venulis copiose reticulatis supra immersis subtus prominulis; inflorescentiis sub fructu axillaribus anguste paniculatis 2–8 cm. longis, rhachi, ramulis brevibus et pedicellis crassis (ad 3 mm. longis) dense stellato-puberulis; receptaculis sub fructu subglobosis vel late obovoideis maturitate 10–16 mm. diametro cinereo-puberulis demum glabrescentibus, apice vestigio perianthii conspicue apiculatis, coriaceis, ad 1 mm. crassis, demum irregulariter fissis, intus pilis stramineis ad 0.8 mm. longis setosis; drupis 1–5 per receptaculum ovoideis ad 7 mm. longis et 5 mm. latis.

BRITISH NEW GUINEA: Central Division, Mafulu, alt. 1200 m., *Brass* 5427 (A, TYPE, NY), Nov. 3, 1933 (large climber in lower primary forest; leaves gray beneath; fruiting receptacles red, the drupes black).

Although flowers are not available, there seems no doubt that the cited collection represents a new species of *Palmeria*, characterized by the persistent and extremely close and dense whitish tomentum of the lower surfaces of leaf-blades. *Palmeria incana* does not seem closely allied to described species, but it is perhaps of the relationship of *P. hypochrysea* Perk. and *P. hypargyrea* Perk. It differs from both in the above-mentioned pubescence, and in its somewhat larger leaf-blades which are thicker in texture.

***Palmeria habbemensis* sp. nov.**

Frutex parvus scandens 2–3 m. altus, ramulis gracilibus elongatis purpurascensibus quadrangularibus demum subteretibus cinereo-stellato-puberulis demum glabrescentibus; foliis oppositis, petiolis gracilibus 3–8 mm. longis ut ramulis vel densiore puberulis, laminis tenuiter coriaceis oblongis, (3.5–) 4–6 cm. longis, (1.3–) 1.5–2.8 cm. latis, basi ex rotundatis subacutis, apice breviter acuminatis (acumine 3–8 mm. longo subacuto), margine integris, supra pilis stellatis flavescentibus minutis paucis obtectis mox glabris, subtus indumento stramineo arcto densissime indutis (pilis stellatis multiramosis, ramulis 0.1–0.15 mm. longis), costa supra impressa subtus valde elevata, nervis secundariis utrinsecus 4–6 patentibus anastomosantibus supra immersis vel leviter insculptis subtus valde prominulis, venulis supra immersis subtus paullo prominulis indumento obscuris; inflorescentiis ♂ axillaribus anguste paniculatis (1.5–) 2–5 cm. longis pauciramosis ubique pilis stramineis

stellatis multiramosis minutis (circiter 0.15 mm. diametro) dense obtectis, bracteis linearibus ad 3 mm. longis caducis, pedicellis gracilibus sub anthesi 4–9 mm. longis, bracteolis linearibus parvis vel nullis; floribus sub anthesi 4.5–5.5 mm. diametro, receptaculo tenuiter carnosio, tepalis 5 vel 6 subcoriaceis deltoideis acutis 1.5–2 mm. longis et latis; staminibus circiter 25, antheris sessilibus deltoideo-oblongis obtusis, circiter 0.8 mm. longis, glabris vel apicem versus obscure puberulis.

NETHERLANDS NEW GUINEA: 9 km. northeast of Lake Habbema, alt. 2800 m., Oct. 1938, *Brass* 10590 (TYPE), 10591 (scrambling shrubs 2–3 m. high, common in young second growths of forest clearings; upper surface of leaves smooth and shining).

This species and the following appear to represent a small-leaved montane group in *Palmeria*, probably closely related to the preceding species (*P. incana*) of lower altitudes, but differing in obvious foliage characters. Among other described species, these two suggest *P. pulchra* Perk., another small-leaved species from high elevations in Northeastern New Guinea. However, our species apparently have the tomentum of the lower surfaces of the leaf-blades denser. In the original publication (Pflanzenr. 49 (IV. 101. Nachtr.): 38. 1911) of *P. pulchra*, authentic material of which is not available to me, Perkins refers to "folia . . . subtus pilis stellatis minutis instructa," while in her more recent key (Bot. Jahrb. 52: 214. 1915) she refers to the hairs as "zerstreuten." Neither of these remarks suggests the dense persistent tomentum which entirely obscures the lower leaf-surfaces of the present two new species. The inflorescences of our species are apparently more reduced than those of *P. pulchra*. *Palmeria habbemensis* and its relative from the Wharton Range are distinguished from each other as follows:

Leaf-blades (3.5–) 4–6 cm. long, (1.3–) 1.5–2.8 cm. broad; inflorescence (1.5–) 2–5 cm. long; stamens about 25, the anthers strictly sessile
 *P. habbemensis*.
 Leaf-blades 1.8–3.5 cm. long, 0.6–1.8 cm. broad; inflorescence 0.5–2 cm. long; stamens 15–20, with short but obvious filaments. . . . *P. montana*.

***Palmeria montana* sp. nov.**

Frutex parvus multiramossus scandens 2–3 m. altus, ramulis gracilibus subteretibus cinereo-stellato-puberulis mox glabris; foliis oppositis vel suboppositis, petiolis gracilibus 1.5–4 mm. longis ut ramulis puberulis, laminis chartaceis ovatis vel ovato-oblongis, 1.8–3.5 cm. longis, 0.6–1.8 cm. latis, basi rotundatis vel late obtusis, apice acuminatis (acumine 2–7 mm. longo subacuto), margine integris et leviter recurvatis, supra glabris vel pilis stellatis cinereis minutis sparsim obtectis, subtus indumento albo-cinereo arcte densissime indutis (pilis stellatis multiramosis,

ramulis circiter 0.1 mm. longis), costa supra impressa subtus elevata, nervis secundariis utrinsecus 3–5 brevibus inconspicue anastomosantibus supra subplanis subtus paullo prominulis, venulis reticulatis utrinque immersis vel supra visibilibus; inflorescentiis ♂ axillaribus racemosis 0.5–2 cm. longis paucifloris ubique indumento cinereo denso indutis (pilis stellatis circiter 0.15 mm. diametro), bracteis oblongis ad 2 mm. longis caducis, pedicellis gracilibus sub anthesi 3–7 mm. longis bracteolam lineari-oblongam 1.5–2.5 mm. longam prope medium interdum gerentibus; floribus sub anthesi circiter 5 mm. diametro demum ad 10 mm. diametro apertis, receptaculo tenuiter carnosio intus interdum obscure puberulo, tepalis 5 submembranaceis elongato-deltaideis acutis, circiter 4 mm. longis et 2.5 mm. latis; staminibus 15–20, filamentis brevibus circiter 0.4 mm. longis tenuiter carnosio, antheris deltaideo-oblongis obtusis glabris 0.8–0.9 mm. longis; inflorescentiis ♀ ut ♂ plus minusve similibus; floribus subglobosis sub anthesi 2–2.5 mm. diametro, receptaculo carnosio 0.3–0.4 mm. crasso intus conspicue stramineo-setoso, tepalis 5 inconspicuis inflexis deltaideis circiter 0.4 mm. latis; carpellis 10–15 sub anthesi 1.5–2 mm. longis, ovario oblongo-ellipsoideo distaliter puberulo in stylum subulatum attenuato; receptaculis sub fructu irregulariter subglobosis ad 15 mm. diametro coriaceis mox glabris demum irregulariter fissis, intus pilis stramineis ad 0.7 mm. longis setosis; drupis 1–5 per receptaculum.

BRITISH NEW GUINEA: Central Division, Murray Pass, Wharton Range, alt. 2840 m., *Brass 4667* (A, TYPE, NY), July 31, 1933 (scandent much-branched slender shrub about 2 m. high, growing along forest fringing borders; leaves pale, recurved at margin, pale brown-pubescent beneath; flowers cream-colored; fruit irregularly bursting, the seeds shining reddish brown), *4751* (slender bush of somewhat scandent habit 2–3 m. high, not common in forest undergrowth; leaves gray-brown beneath; flowers cream-colored).

The type bears pistillate inflorescences and fruits, no. *4751* staminate inflorescences. The latter specimen has leaves averaging somewhat larger than those of the type collection, but in view of the similarity of the two collections in other respects it seems likely that no. *4667* was merely growing in a comparatively exposed situation.

Palmeria Fengeriana Perk. Pflanzenr. 49 (IV. 101. Nachtr.): 39. 1911; Bot. Jahrb. 52: 216. 1915.

BRITISH NEW GUINEA: Central Division, Mafulu, alt. 1700 m., *Brass 5360* (A, NY) (scandent shrub in mountain-crest forest; flowers cream-colored). NETHERLANDS NEW GUINEA: Bele River, 18 km.

northeast of Lake Habbema, alt. 2200 m., *Brass* 11367 (large scrambling shrub on bank of river); 15 km. southwest of Bernhard Camp, Idenburg River, alt. 1800 m., *Brass* 12307 (large scrambling shrub, common in open places in mossy forest).

The above-cited specimens are referred to *P. Fengeriana* with some hesitation, since they differ in certain respects from the original description. Our specimens have the leaf-blades up to 17 cm. long, the secondary nerves often as few as 5 per side, the inflorescences up to 35 cm. long and 15 cm. broad, and the staminate flowers up to 7 mm. in diameter. These appear to be characters of degree only, and I believe that the specimens fall into *P. Fengeriana* as delimited by the several citations in the second reference above, although I have seen none of this material. Among our specimens, no. 5360 has the hairs of the inflorescence and of the lower leaf-surface cinereous or whitish rather than dull yellow.

The species has previously been reported only from Northeastern New Guinea. *Palmeria paniculata* Ridley, from Netherlands New Guinea, seems closely related to *P. Fengeriana* and perhaps conspecific, although the leaves are said to be glabrous. Examination of type collections is desirable before the cited Brass material is finally placed.

***Palmeria puberula* sp. nov.**

Frutex scandens, ramulis elongatis gracilibus purpurascens subteretibus parce cinereo-stellato-puberulis mox glabris; foliis oppositis, petiolis gracilibus 8–13 mm. longis ut ramulis puberulis, laminis papyraceis oblongo-ellipticis, 11–16 cm. longis, 5–8 cm. latis, basi obtusis, apice cuspidatis vel breviter acuminatis, margine integris et leviter recurvatis, supra glabris vel ad costam pilis stellatis parvis sparsim obtectis, subtus pilis stramineis stellatis multiramosis parvis (0.2–0.3 mm. diametro) paucis instructis demum glabrescentibus, costa supra leviter impressa subtus prominente, nervis secundariis utrinsecus 5–9 erecto-patentibus anastomosantibus supra minute prominulis subtus elevatis, venulis reticulatis utrinque paullo prominulis vel supra subplanis; inflorescentiis ♂ axillaribus vel e ramulis infra folia orientibus paniculatis multifloris valde ramosis, 10–15 cm. longis, 5–8 cm. latis, ubique (praecipue floribus) pilis stellatis adpressis minutis ad 0.1 mm. diametro densissime cinereo-puberulis, rhachi gracili subtereti demum glabrescente, bracteis parvis elongato-oblongis mox caducis, bracteolis ut videtur subnullis, pedicellis gracilibus sub anthesi 3–5 mm. longis; floribus late cupuliformibus sub anthesi 4–6 mm. diametro, receptaculo submembranaceo explanato, tepalis 5 membranaceis deltoideis 3–3.5 mm. longis et latis apice conspicue angustatis et acuminatis; staminibus 30–35, antheris sessilibus oblongo-deltoideis obtusis 0.8–1 mm. longis.

NETHERLANDS NEW GUINEA: 4 km. southwest of Bernhard Camp, Idenburg River, alt. 850 m., March 1939, *Brass 13463* (TYPE) (large scandent shrub, on an open river-bank in rain-forest; flowers yellow).

Palmeria puberula is characterized by its sparsely pubescent leaf-blades, its closely pale-stellate-puberulent inflorescences, and its large flowers. Related to *P. Fengeriana* Perk. and *P. paniculata* Ridley, it is distinguished from both by its very different type of pubescence. Its relationship may also be with *P. myriantha* Perk., a species with sparser pubescence throughout, smaller leaves, and much smaller flowers.

ISOMEROCARPA gen. nov.

Arbores saepe procerae, foliis oppositis petiolatis, laminis chartaceis vel coriaceis margine serratis vel subcrenatis; inflorescentiis axillaribus solitariis brevibus cymosis paucifloris pedunculatis; floribus hermaphroditis pedicellatis ubique glandulosis saepe ternatis, bracteis parvis caducis, pedicellis apice bracteolas 2 papyraceas valvatim involucentes mox deciduas gerentibus, cicatricibus sub anthesi conspicuis; receptaculo carnosio urceolato extus apicem versus tepala stamina et staminodia gerente; tepalis 8 biseriatis tenuiter coriaceis oblongis sub anthesi patentibus, 4 exterioribus et 4 interioribus similibus; staminibus 4-9 carnosis, filamentis brevissimis crassis utrinsecus glandula aliformi auctis, antheris extrorso-lateraliter bilocellatis, locellorum valvis sursum dehiscentibus, connectivo in appendiculam complanatam producto; staminodiis 2- vel 3-seriatis intra stamina 9-16 lanceolato-oblongis, exterioribus manifeste majoribus; carpellis 10-12 in fundo receptaculi congestis, in stylos subulatos exsertos desinentibus, ovulo basim ovarii versus suberecto; receptaculo fructifero ellipsoideo vel anguste ovoideo coriaceo in valvas 3 vel 4 subaequales dehiscente, fructus carpellis inclusis angustis longe pilosis in stylos longos desinentibus, pericarpio tenui semini adnato.

Isomerocarpa is proposed to include *Daphnandra novoguineensis* Perk., originally described on the basis of a fruiting specimen; in this condition the plant is indeed so suggestive of the Australian species of *Daphnandra* that one would not seriously question its place, although the dehiscence of the fruiting receptacle is different. In describing a second New Guinean species of this alliance, Gilg and Diels (Notizbl. Bot. Gart. Berlin 9: 466. 1925) apparently did not consider the generic placing of their plant, as flowering specimens are quite unlike those of *Daphnandra*. The presence of involucrate bracteoles beneath each flower is in itself a sufficiently pronounced character to remove the New Guinean species from *Daphnandra* according to Perkins' key to genera (Pflanzenr. 4 (IV. 101): 14. 1901).

Isomerocarpa differs from *Daphnandra* in the presence of the above-mentioned involucrate bracteoles, in having the tepals 8 and the members of both series similar in number and texture (the tepals of *Daphnandra* being 10–15, those of the inner series more numerous, larger, and thinner in texture than those of the outer), in the somewhat produced and conspicuously flattened anther-connective, in the essentially basal rather than pendulous ovule, and in having the fruiting receptacle dehiscent into three or four subequal valves (rather than inequilaterally along one side as in *Daphnandra*).

A closer relative of the new genus appears to be the Australian *Atherosperma* Labill., which agrees with the New Guinean plants in having paired bracteoles beneath each flower. *Isomerocarpa*, however, differs from *Atherosperma* in having its flowers hermaphrodite rather than dioecious or polygamo-monecious, in having its stamens 4–9 rather than 10–16 and its filaments inconspicuous (those of *Atherosperma* being slender and obvious), in its produced anther-connective, and in its ellipsoid fruiting receptacle (that of *Atherosperma* being either subglobose or urceolate). The staminate flowers of *Atherosperma* completely lack both staminodes and carpels, the receptacle being flattened, while the pistillate flowers have more numerous (at least 25) carpels than those of *Isomerocarpa*. The staminodes of *Atherosperma*, present only in pistillate flowers, are arranged on the inner surface of the receptacle above the carpels, while the new genus has the staminodes on the distal outer surface of the receptacle.

Isomerocarpa, a member of the Subfamily Atherospermoideae, Tribe Laurelieae, according to Perkins' treatment, seems to have as strong a combination of characters as any of the five genera of this relationship treated in the *Pflanzenreich*. These genera, although small, are well marked and will presumably seem quite acceptable to future monographers. The name of the new genus refers to the fact that the fruiting receptacle splits into equal valves.

***Isomerocarpa novoguineensis* (Perk.) comb. nov.**

Daphnandra novoguineensis Perk. Bot. Jahrb. 52: 217. f. 5. 1915.

NORTHEASTERN NEW GUINEA: Morobe District, Ogeramng, alt. about 1800 m., *Clemens* 4598 (tall tree in forest hills, the trunk 38–60 cm. diam., the buds greenish white), 4796, 5456; Yunzaing, alt. about 1400 m., *Clemens* 3853 (tall tree, the trunk 60 cm. diam. or more; fruit green; tree growing with *Calophyllum* sp.). BRITISH NEW GUINEA: Central Division, Ononge Road, alt. 500 m., *Brass* 3913 (gray-barked tree in rain-forest, the leaves thick, dark, pale beneath; flowers brown;

fruit green, hard). NETHERLANDS NEW GUINEA: Balim River, *Brass & Versteegh 11194* (on forested slopes at 2160 m.; tree 26 m. high, the trunk 60 cm. diam., the crown fairly wide-spreading, the bark thick, gray, 18 mm. thick, the wood brown; flowers red; fruits green); 4 km. southwest of Bernhard Camp, Idenburg River, alt. 900 m., *Brass 13085* (common subsidiary tree 10–12 m. high, in mossy forest; flowers yellow, with red stamens); 15 km. southwest of Bernhard Camp, Idenburg River, *Brass & Versteegh 11948* (tree 25 m. high, frequent in primary forest at 1590 m. alt., the trunk 44 cm. diam., the crown not wide-spreading, the bark 11 mm. thick, dark brown, the sap-wood yellow, the heart-wood brown-yellow; fruits light green), *11984* (tree 31 m. high, frequent in primary forest on the slope of a ridge at 1900 m. alt., the trunk 60 cm. diam., the crown not wide-spreading, the bark 12 mm. thick, rough, fissured, the sap-wood light yellow, the heart-wood brown-yellow; flowers red).

The species has previously been reported only from Northeastern New Guinea. The above-cited specimens agree well with the original description, although they may equally well be referred to *Daphnandra Perkinsiae* Gilg & Diels. From a comparison of the two descriptions I am inclined to doubt the existence of two species, as the differences in leaf-size, texture, apex, and punctation mentioned by Gilg and Diels seem very slight. In general, it appears that specimens from higher elevations have thicker and smaller leaf-blades, but I fail to find specific differences among those cited. The reduction cannot definitely be made without examination of the two types.

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PLANTAE PAPUANAE ARCHBOLDIANAE, VI*

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THE Papuan material under study contains representatives of several families with but a few numbers each. In some groups considered below the material is entirely from Netherlands New Guinea (Third Archbold Expedition), the Fly River collections having previously been named and recorded, while in others our total material of the family is considered. Included also are a few specimens, misplaced in the original hasty ordering up of the collections for reference, representing families previously considered. The new species and the range extensions here recorded were detected in our effort to complete the identifications of the material in certain of these smaller families. As far as we know, no representatives of the genera *Elaeagnus*, *Crypteronia*, *Duabanga*, and *Callitriche* have previously been reported from New Guinea. *Elaeagnus* and *Callitriche* were to be expected, as both have long been known as occurring in Malaysia and in Australia. *Duabanga* and *Crypteronia* are small genera characteristic of Malaysia, New Guinea perhaps representing the southeastern limits of their geographic range.

ULMACEAE

Celtis Linnaeus**Celtis similis** sp. nov.

Arbor 8 m. alta, trunco 25 cm. diametro; ramulis brunnescentibus glabris, novellis adpresse pubescentibus, pilis flavescentibus; foliis subcoriaceis petiolatis, pro more affinium eximie trinerviis, lanceolato- ad ovato-ellipticis, 2.5–5 cm. longis, 1.2–2.2 cm. latis, basi subrotundatis vel obtusis paullo obliquis, apice saepe longe acuminatis, acumine 0.4–1.2 cm. longo, acuto vel subapiculato, margine integris vel supra medium remote serratis, supra glabris vel novellis parce pubescentibus, subtus praecipue in costa nervisque primariis parce pubescentibus, axillis plerumque minute fasciculato-barbatis; costa recta in tertia parte supera nervos utrinsecus 1–2 emittente, nervis basalibus 2 superne evanescentibus, exterius \pm 4 venas laterales arcuatim anastomosantes emittentibus; venularum reticulo \pm inconspicuo; stipulis ipsis non visis; petiolo

*(Botanical Results of the Richard Archbold Expeditions) See Jour. Arnold Arb. 20: 324–345. 1939; op. cit. 21: 163–200, t. 1. 1940; op. cit. 292–327; op. cit. 511–527; op. cit. 22: 32–59. 1941.